

Subject card

Subject name and code	Regional Analysis, PG_00157504						
Field of study	Information Science and Econometrics						
Date of commencement of studies	October 2024		Academic year of realisation of subject		2025/2026		
Education level	postgraduate studies		Subject group		Obligatory subject group in the field of study Subject group related to scientific research in the field of study		
Mode of study	full-time studies		Mode of delivery		at the university		
Year of study	2		Language of instruction		Polish		
Semester of study	3		ECTS credits		2.0		
Learning profile	academic		Assessment form				
Conducting unit	Katedra Ekonometrii -> Faculty of Management						
Name and surname of lecturer (lecturers)	Subject supervisor		dr Marta Chylińska				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	15.0	0.0	0.0	0.0	30
	E-learning hours included: 0.0						
	Additional information: Text analysis with discussion						
	Task solving						
	Lecture with multimedia presentation						
Learning activity and number of study hours	Learning activity	Participation in didactic classes included in study plan		Participation in consultation hours		Self-study	SUM
	Number of study hours	30		10.0		10.0	50
Subject objectives	Developing the ability to analyze and model data observed at the regional level.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[liEMU2_U07] The student is able to build advanced formal models of complex economic phenomena and processes, estimate them, carry out their verification and apply them to modeling, forecasting and optimization of resources of economic institutions of varying degrees of complexity, their structure and the course of processes in them.	The student is able to formulate and estimate an econometric model and verify hypotheses regarding the regional economy, population income and the level of consumption of selected goods.	[SU1] oral statement/conversation/discussion [SU4] test/exam - oral or written [SU5] implementation of a problem task
	[liEMU2_W04] The student has an in-depth knowledge of advanced mathematical, statistical, econometric and IT methods that enable the acquisition, processing and analysis of data reflecting the functioning and growth of the national economy and its components, as well as the phenomena and processes occurring in their environment.	The student is able to formulate and estimate an econometric model and verify hypotheses regarding the regional economy, population income and the level of consumption of selected goods.	[SW4] test/exam - oral or written [SW1] oral statement/conversation/discussion [SW5] implementation of a problem task
	[liEMU2_U05] The student is able to make a statistical description of basic and detailed economic categories at an advanced level, formulate and verify hypotheses about their formation.	The student is able to formulate and estimate an econometric model and verify hypotheses regarding the regional economy, population income and the level of consumption of selected goods.	[SU1] oral statement/conversation/discussion [SU4] test/exam - oral or written [SU5] implementation of a problem task
	[liEMU2_K03] The student is able to communicate freely with the public inside and outside the workplace, transfer his knowledge and share his skills through various media.	The student is able to perform and present in a clear and accessible way an answer to a question related to regional analyses in a group forum	[SK1] oral statement/conversation/discussion
	[liEMU2_W02] The student has an in-depth knowledge of economic structures and institutions, the processes taking place in them, the connections between them and their dynamics, and has an in-depth knowledge of the phenomena and processes taking place in their environment.	The student knows the regularities occurring in the regional economy and the models describing them	[SW4] test/exam - oral or written [SW1] oral statement/conversation/discussion
	[liEMU2_K01] The student understands the need for continuous completion and deepening of acquired knowledge. The student inspires and organizes others' learning processes.	The student understands the need to supplement knowledge about economic modeling and is open to learning modern modeling methods	[SK1] oral statement/conversation/discussion [SK8] observation of student's independent or team work
Subject contents	1. Region as a small open economy. Selected theories of regional development. Measures of regional development: growth of the relative importance of the region in the country, growth of management efficiency, competitiveness of regions. Regional policy - basic concepts and principles. Territorial division of the European Union - Nomenclature of Territorial Units for Statistics (NUTS). 2. Specificity of localized data. Measures of spatial concentration: Lorenz curve, Gini index, LQ location coefficient, Herfindahl-Hirshman index. Visualization of spatial data - creation of cartograms, cartodiagrams. 3. Methods of describing connections between geographically located units (countries, regions) - spatial weight matrices, distance matrices. 4. Differentiation of population income and consumption level of selected goods in Polish voivodeships - testing spatial autocorrelation of variables (Moran's I statistics, LISA statistics). 5. Demand analysis and labour market models in regional terms, taking into account spatial interdependencies, spatial autoregression models, spatial autocorrelation of errors and cross-regression. 6. Economic convergence at the level of Polish voivodeships and subregions and regional convergence in the European Union		
Prerequisites and co-requisites	Knowledge of the basics of macroeconomics, microeconomics, mathematics, statistics and econometrics. Ability to use Excel, Gretl EViews and the R package.		

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
		51.0%	100.0%
Recommended reading	Basic literature	Gawlikowska-Hueckel K., Szlachta J. (red.) (2014), Wrażliwość polskich regionów na wyzwania współczesnej gospodarki. Implikacje dla polityki rozwoju regionalnego, Wolters Kluwer. Sucheckie B. (red.) (2010), Ekonometria przestrzenna, Wydawnictwo C.H. Beck. Sucheckie B. (red.) (2012), Ekonometria Przestrzenna II. Modele zaawansowane, Wydawnictwo C.H. Beck.	
	Supplementary literature	Zaucha J., Brodzicki T., Ciolek D., Komornicki T., Mogiła Z., Szlachta J., Zaleski J. (2015), Terytorialny wymiar wzrostu i rozwoju, Difin	
	eResources addresses	Adresy na platformie eNauczanie:	
Example issues/ example questions/ tasks being completed			
Work placement	Not applicable		

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